### Top Facts about Our On-line Respondents and How We Plan to Use That Knowledge



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A Presentation by Chris Gottschall for FedCASIC, Washington DC, March 23, 2011

## Overview

- Began offering web reporting option in 2003
- Currently, over 200 NASS surveys have a web reporting instrument
  - Presented as part of the mail out package
    - Includes access and log-in info in cover letter
  - Typically 3-5% web response rate
- 2007 Census of Agriculture offered web reporting
- Nearly 100,000 web responses
  - Rates varied widely by state: 1.7% 5.1%
  - Peak day: 4,200 web responses

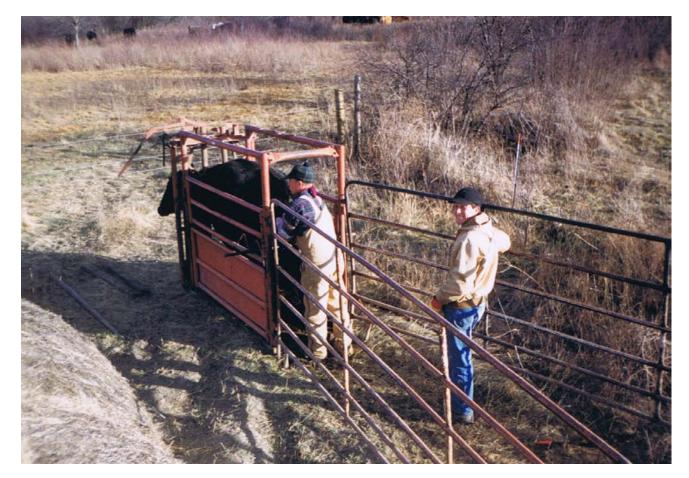


## 2007 Census of Agriculture (COA) Web Respondents Analysis

- Compared web to non-web respondents
  - Had an initial hypothesis of who our web respondents were
- KEY characteristic of web respondents:
  - Had high speed internet access
  - 66.8% versus 33.2% for mail respondents



## What else were we able to "extract" from the data:





## 2007 COA Web Respondents (2)

#### **Available List Frame Data**

- Web respondents:
  - More recently added to list frame
  - Less control data on list frame
  - Out of Scoped earlier on in the process
  - More urban geographical areas



## 2007 COA Web Respondents (3)

#### **Comparisons on Data Reported in COA**

- Web respondents:
  - Reported more data items on average
  - Clustered around both ends of the value of production spectrum
  - Operations with "specialty crops" OR "other crops and hay"



# 2007 COA Web Respondents (4)

#### **Reported Demographics**

- Web respondents:
  - Primary occupation other than farming
  - More days worked off farm
  - Higher household income
  - More female primary operators

#### **Data Quality Analysis**

- Web respondents:
  - More "clean as reported" records
  - Fewer "clean, but reviewed" records
  - Fewer total and per record imputed items



## What do we do with this ...?

- In the 2007 COA we got more online responses than expected
- Online reporting appears to produce better data
- Online reports are faster and cheaper than other modes (even mail)

# How can we increase the number of reports online?



## AKA "Milking" the information...





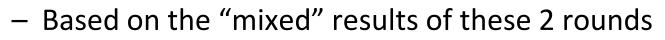
# 2012 COA Testing Overview

- Primary goal was content test of questionnaire
  - Initial mail-out with a second mailing to nonrespondents
    - Voluntary, no phone or interviewer follow-up
- Also used to develop and test processing systems
- Secondary goal was testing various ways to increase web responses
  - ALSO examine if these treatments affected overall response rates
  - Findings applicable to some of our annual projects too



# 2012 COA Testing Overview (2)

- Round 1
  - December 31, 2009 (Jan Mar 2010 data collection)
  - Sample size: 5,000 (2,000 embedded web test)
- Round 2
  - Systems AND questionnaire testing
    - Consider this our "dress rehearsal"
  - December 31, 2010 (Jan Mar 2011 data collection)
    - Web test group opened slightly earlier
  - Sample size: 32,000 (2,000 embedded web test)
- Possibly do some additional web only tests





# COA Content Test



#### Round 1 Web Experiment Results



# COA Content Test-Round 1

Three main treatment groups:

#### Web Group

- Previously reported high speed internet access
- No paper questionnaire; special web reporting letter
- 4 other treatment subgroups

#### • Web/Paper Group

- Previously reported high speed internet access
- Paper questionnaire and special web reporting letter
- 4 other treatment subgroups

#### • Main Group

- "Standard" mail package: paper questionnaire, cover letter, and web reporting instructions
- Selected for things to test in questionnaire

## COA Content Test-Round 1: Additional Details

- Both the Web and Web/Paper groups contained tests of 4 different letters:
  - With a due date
  - Asking those with high speed internet to respond via the web
  - With a due date and asking those with high speed internet to respond via the web
  - A general letter
- In follow-up mailing to initial nonrespondents, ALL 3 groups received the "Standard" mail package



## Experiment Results: Web and Overall Response Rates

Group	Web Response Rate	Mail Response Rate	Non-response Rate
Web	22%	0%	78%
Web/Paper	27%	11%	62%
Main	5%	29%	66%
OVERALL	13.0%	19.6%	67.4%



# Experiment Results (2)

- For the Web and Web/Paper groups, included previous web respondents/nonrespondents
  - As expected, previous web respondents were more likely to respond again via the web
  - BUT differences were not that large
- Similar Web response rates across all four treatment subgroups in both the Web and Web/Paper groups



## Experiment Results (3): Timeliness of Web Reports

• The vast majority of our web responses occur in a one week "bubble" about a week after the mailing

Group	Percent of Web Responses Occurring in "Bubble"		
Web	42.6%		
Web/Paper	34.4%		
Main	24.9%		



# COA Content Test



#### Round 2 Web Experiment Results



## COA Content Test-Round 2

- Much larger, overall sample
  - Web experiment sample about the same size
  - ALL contacts receive web reporting option
- Questionnaire becoming more final
  - Incorporates first round changes
  - So still a test of content/updates
- Also focused on testing entire "system"



# COA Content Test-Round 2

- Contained a somewhat simplified version of the first round's experiment:
  - Sample with high speed internet access
  - Received only cover letter (two different versions) and web login instructions
  - Mailed prior to main group
  - Web group handled with main group for follow-up
- Primary goal was an attempt to replicate and confirm first round results



# Unfortunately, sometimes the results are not what we expect...





## **Experiment Results-Round 2**:

Not as "confirming" as we had hoped

Group	Web Response Rate	Mail Response Rate	Non-response Rate
Web	10%	16%	74%
Main	3%	38%	59%
OVERALL	3.7%	36.4%	59.9%

- In the first round, we had 22% and 27% web response rates for our web target groups
  - Sometimes research leads to more questions than answers...this was a real head-scratcher



## **Conclusions and Future Plans**

- High speed internet access may be "conducive" to web reporting
  - Possible indicator of underlying trait/attitude
- Plans for future web response experiments prior to 2012 COA.
  - Targeted "web only" mail-out to operations with high speed internet access
    - NEED better information on this tactic
  - Emphasis on deadline as deadline before telephone or in person contacts
  - Emphasis on getting responses from "out of scope" cases

